



Newsletter

Volume 7 Issue 9

September 2007

Electrolysis Rust Removal

Demonstration and Written by John Wilson

John Wilson provided a demonstration on the use of electrolysis to remove rust from hand tools. For those of you who'd like to give it a try yourself you need the following supplies.

- A two to five gallon plastic container, metal won't work
- A battery charger or power supply capable of approximately 10 amps at 12-14 volts
- A reasonably flat piece of sacrificial metal for an anode, like a kettle cover.
- A box of Arm and Hammer Washing soda or Baking Soda available at Coborn's
- A tablespoon
- One to five gallons of water
- A pair of rubber cleaning gloves
- A non metallic 3M Scotch Bright Finishing Pad #10144NA from Hirschfield's
- A small stainless steel wire brush

Electrolysis is a process used to induce an electrical current in a soda and water bath to remove rust from metal. The process requires the simple household items mentioned above.

You start by filling the plastic tub with a solution of Arm and Hammer Washing Soda or Baking Soda, using a ratio of one tablespoon of soda for each gallon of water. Next, with your battery charger turned off, connect the negative terminal of the battery charger to your rusted item and submerge the item as well as the



clamp into the solution. Connect the positive terminal of the charger to the sacrificial metal plate, or anode as it's referred to, which will then need to be clamped to the side of the tub to prevent the positive terminal from becoming submersed and corroded by the soda bath. Try to keep

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CMWA Meeting Recap

Sauk Rapids-Rice Middle School on August 15, 2007 at 7PM. Recap adapted from secretary's meeting minutes

Electrolysis Rust Removal

John Wilson delivered an informative demonstration on removing rust from tools by electrolysis.

See article this page

CMWA Student Outreach

The CMWA has again agreed to offer the Student Outreach program this late fall to 11 to 15 year old students at the Sauk Rapids/Rice Middle School workshop (our usual meeting place).

John Wilson has once again agreed to chair the fall session, and is seeking volunteers to assist him. Classes will be held for four consecutive Tuesdays on November 13th, 20th, 27th, and December 4th, from 7:00 pm to 8:30 pm. Please contact John Wilson at 320 253-3432 if you can find the time to help. Even one or two nights can make a big difference.

This seasons project will be a treasure box (about the size of a shoebox), with a hinged cover.

CMWA Swap Meet

Rollie Johnson strongly feels that we as a club should once again try to make a go of the wood workers swap meet. By a majority vote the board of directors agreed to give it one more try, probably in February, and Brad Knowles has agreed to chair the event. Committee's will soon be formed to begin planning the event. Brad will pursue the idea of combining a wood carvers show with the swap meet.

Pop Tabs for Ronald McDonald House

Tom Homan is collecting pop can tabs for the Ronald McDonald House. Please collect your pop tabs and bring them to a future meeting.

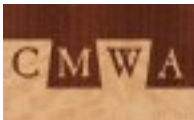


Monthly Door Prizes

Larry Lieser won this month's door prize, which consisted of a stainless steel fractional caliper, a sanding mat and two tack cloths.

Next Meeting

Our next meeting will be held at the Sauk Rapids-Rice Middle School woodshop. A Festool representative will provide a demonstration.



September 2007

Central Minnesota Woodworker's Assoc.

The CMWA is a group of men and women from around the St. Cloud Minnesota area who share a common interest in the art and business of woodworking. We meet monthly in Sauk Rapids and share information, techniques and topics of interest in the area of woodworking.

President Scott Randall

Vice President Tom Doom

Treasurer Kurt Zniwski

Secretary John Wilson

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Ron McKeever, Scott Schroeder
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Next Meeting:

Sept 19th at 7:00PM at SR-R Middle School

Board Meeting:

Sept 19th at 6:00PM at Coborn's in Sauk Rapids

the majority of the kettle cover or anode well submerged to achieve the best transfer of current from the rusted object to the anode. It works best to place the rusted item within about an inch of the anode to maximize the current transfer. Note, do not allow the rusty object to come in contact with the anode. This may cause the charger to overload and fail.

Turn on the charger and watch the tiny bubbles begin to slowly fizz away from the rusted item. It may be necessary to let the process cook away for several days, depending on how badly the object is rusted, if the item has significant rust or the anode is not large enough the process usually takes longer.



To better clean the object on all sides throughout the process, reposition the rusted item as often as necessary, with the power turned off of course.

Once the process has turned all of the rust jet black, turn the power off and remove the item from the bath. Wire brush the black coating from the item using a small stainless steel brush, available from most hardware stores for a buck. Finally use a 3M Scotch Bright

Scott Randall will be hosting a CMWA cutting board making day at his home on Saturday, September 15th. Scott's home address is at 1025 Minnesota Blvd, Saint Cloud. Please call Scott with questions 259-4893.

Woodcraft is offering an in-store discount to CMWA members with some restrictions. Please visit the store to find out more or contact Timothy Roseth at minneapolis-retail@woodcraft.com.

Their store location is at 9125 Lyndale Ave S, Bloomington, MN 55420 Phone: (952) 884-3634

Finishing Pad product #10144NA available from Hirschfield's to remove the balance of the black coating.

Once you've sanded your item to the desired patina, wash it in warm soapy water, dry it off, and apply a coat of Johnson's paste wax to it. Do not use waxes that contain silicone if your cleaning a woodworking tool that will come in contact with the wood you're working. Doing so will cause finishing problems later.

That's it.

So far I've used this process to clean a dozen handsaw blades as well as three disassembled block planes. They look forty years newer.

It's easy to do, and takes almost no effort. Let me know how yours turns out.





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 St. Cloud, MN 56302-1955

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Next Meeting
Wednesday, September 19th at 7:00PM
Sauk Rapids-Rice Middle School
 Enter Door 16 (around back) - Room 916



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